SCIENCE AND INVENTION.

Work of the World's Busy Brains in Discovering, Inventing and Creating.

hardening steel, printing cloth, photographic engraving and aniline dyes. ference. Explorations have been made to find 500 feet deep at Cody. Wyo., but the tion has already been collected." work was stopped before a definite result was reached. A number of saline springs, oil wells, and other places intending into the United States, which seem to offer the most favorable conditions for boring and in which a hole put down 1,000 to 2,000 feet would tained a bed of potassium salts or not. lower ball-cup having a downwardly These seven fields are in the neighbor- extending spindle and an upper cup having an upwardly extending hood of (1) Cody, Wyo., (2) Magnetian Lake, near Laramie, Wyo., (3) Byron Springs, Contra Costa County, Cal., (4) Death Valley, Cal., (5) Sierra de las Cucapas basin, Lower California, extending into San Diego County, Cal., (6) Boundbrook, N. J., and (7) Mount

AMENDED RULE ON INTERFERENCE.

The Patent Office promulgates the following amendment to Rule 96:

Tom, Mass.

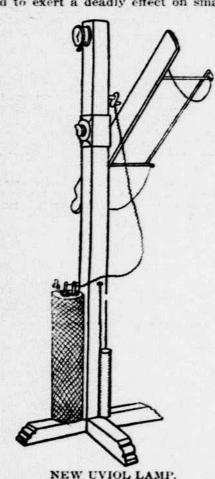
Rule 96 of the Rules of Practice of the United States Patent Office, revised edition of Jan. 2, 1903, reprinted April 15, 1903, is amended to read as fol-

96. Whenever the claims of two or more applications differ in phraseology, but cover substantially the same patentable subject-matter, the Examiner, when one of the applicants is parties such claims as are necessary to cover the common invention in substantially the same language. The parties to whom the claims are suggested will be required to make such claims and cup. put the applications in condition for allowance within a specified time in order that an interference may be de- Wis., has patented a tree guard comclared. Upon the failure of any appli- prising a cant to make the claim suggested within the time specified, such failure or refusal shall be taken without further action as a disclaimer of the invention covered by the claim, and the issue of the patent to the applicant whose application is in condition for allowance will not be delayed unless the time for making the claim and putting the application in condition for allowance be extended upon a proper showing. If a party make the claim without putting his application in condition for allowance, the declaration of the interference will not be delayed, but after judgment of priority the application of such party will be held for revision and restriction, subject to interference with other applications.

THE UVIOL LAMP. A Wonderful Lamp Which Gives Neither Heat Nor Light.

The remarkable success of the Finsen light cure has set scientists all over the world to study and experiment, and the result is the development, by Dr. O. from the ultraviolet rays which it gives out and which have neither light nor heat. These rays are produced by the passage of an electric current through an exhausted glass tube containing mercury vapor. The rays are extremely short wave lengths, and about half of visible (violet) and the other half of invisible (ultraviolet) rays. So far it has appeared that these rays act with a greater energy upon bacteria than those from the Finsen lamp, and it is hoped that it will have the most important use in the treatment of skin diseases and possibly other affections. There are a number of men very actively experimenting as to discover just what its therapeutic value is. Dr. Gradenwitz says:

The radiations from uviol lamps are mid to exert a deadly effect on smaller



insects, a fly being killed in about a minute if placed at about one and a half centimeters distance, where no fatal effects can be produced by the heat. Large numbers of small night insects are found dead beneath the lamps suspended during a Summer night in a room with open windows. Uviol lamps will, moreover, exert a deadly action on still smaller organisms, viz, bacteria, as in the case of the Finsen light, and extensive researches in this respect have been undertaken by Prof. R. Gartner. used to much greater advantage in this connection than the Finsen light, an area of up to 1,400 square centimeters being intensively radiated on by means of it, while the lamps can be approached member of which is made of a single to within less than one centimeter without producing any discomfort, owing to the smallness of its heat radiation. As the skin is transparent to part of the uviol rays, the blood below the skin might be acted on as well by these rays, producing chemical reactions liable to

POTASH SALTS.

from about one to three centimeters distant from the sound skin—e. g., of the arm—for five to the second skin—e. g., of potash in the United States, and we is at first no alteration to be noted, and are buying an immense quantity from only a few hours after radiation will a Germany. For the fiscal year just endreaches a maximum after about one ed we imported 216,182,603 pounds, day, while a slight burning sensation valued at \$3,651,808. In addition to is noted at the same time. After a few the growing use of potash saits in fer- days the skin peels off, and the red portions disappear after two or three tilizers the alkali is an important ele- weeks. One of the two spots had been ment in the manufacture of cyanide of kept under water during the radiation, potassium used in extracting gold, so as to ascertain what effect the heat- foot-rest, a fender, suspension-straps ing of the skin might exert; the two and a depressed heel portion. spots did not, however, show any dif-

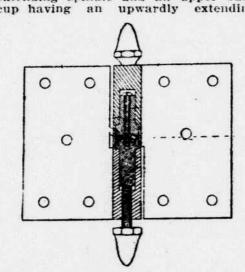
"Professors Stintzing and Matthes are deposits of potassium in the United engaged in extensive experiments to ascertain the curative effects of uviol having one side forming a curved edge, States, and some hopeful indications lamps in connection with diseases of have been discovered. A hole was dug the skin, and much valuable informa-

Work of the Patent Office.

For the week ended Oct. 10, 1905, the Patent Office issued 634 patents, four dicate a considerable quantity of potas- designs, 133 trade marks, five labels, sium and the Geological Survey's last six prints and one re-issue, making a and a curved channel extending diagbulletin points out that there are total of 783, of which 544 patents and onally backward and upward along the including a Mexican locality ex- patents to citizens of foreign countries. verse corrugations.

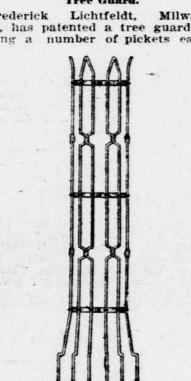
Ball Bearing Hinge.

received a patent for a ball-bearing piece of metal comprising a plate with decide for that district whether it con- hinge which has a combination of a side bars and a cross-bar with the up-



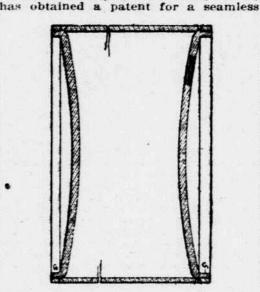
spindle, the balls held between the cups with a screw extending through the upper ball-cup and into the lower cup ready for allowance, will suggest to the for fastening the two cups together. There are two hinge-knuckles which have central recesses for containing said ball-cups and an adjusting screw for raising and lowering the lower ball-

Tree Guard. Frederick Lichtfeldt, Milwaukee, number of pickets each of



Schott, in Germany, of what he calls which consists of a wire folded at its the Uviol lamp, contracting its name middle point forming the upper end of the picket and the two parts extending down as legs to support the picket.

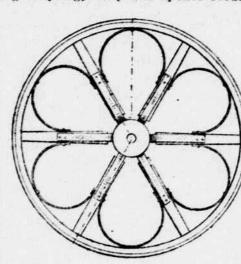
> Puln Barrel. Frank E. Keyes, New York, N. Y.,



barrel or keg made of pulp, and having together. near each end a groove to hold the

Vehicle Wheel.

Robert Weideman, Hawkeye, Iowa, has received a patent for a wheel having a springy felly and spokes secured



spokes to slide into. The springs are 12% secured to the spokes and to the hub to give the necessary elasticity.

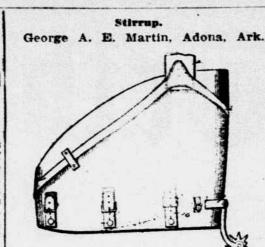
Guard for Fish Hooks. Frank J. Baker, St. Cloud, Minn., has patented a guard for fish hooks con-

sisting of a spring arm capable of

elongation to cover the point of the Garment Hook

John C. Diament, Cedarville, N. J. has patented a hook for garments each

exert a favorable action even on such piece of metal and bent so as to furn-



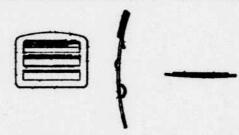
has patented a stirrup combining a

Martin Hermelink, San Francisco,



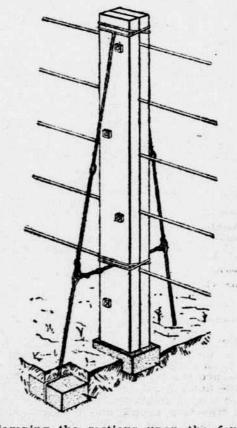
Toothless Buckle.

Mieczyslaw Barabasz, Baltimore Benjamin F. Foss, Fairfield, Mo., has Md., has patented a buckle of single



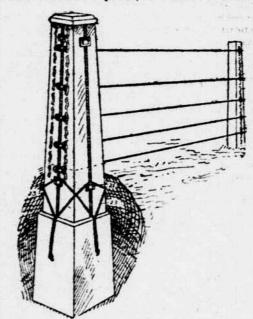
lower edge. Another cross-bar has a to these rods, the foundation is made convex outer surface and tubular with three key formations four income. cross-bar to engage with the other.

Fence Post. John W. Morgan, Fremont, Ind., has patented a fence post consisting of two sections of concrete with means for



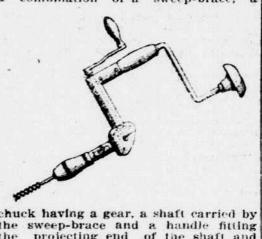
clamping the sections upon the fence body; of a support for holding the post above ground and anchor wires secured thereto.

Cement Post. Hermon W. Timmons, Coatesville,



Bit Brace.

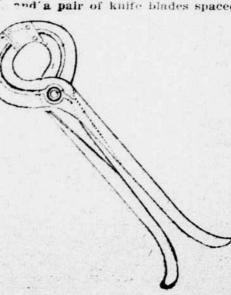
Alexander Bennet and Philip B.



the sweep-brace and a handle fitting the projecting end of the shaft and means to lock the chuck to the sweep-

Hog-Nose Catter.

Samuel H. Miller, Rock Island, Ill., thereto with springs and radial sockets has in combination with the jaws a cut- The ship was all anchor in a calm sea, on the hub for the inner end of the ting block mounted upon one of the and a pair of knife blades spaced



apart and mounted upon the other and adapted to close upon the cut- love you more than words can tell.'

GALVESTON'S GREAT SEA-WALL Maguificent, Monument of Modern

To prevent a repetition of the disaster of five years ago, when the ocean swept women, and children by scores, a great built, partly by the city and partly by the Federal Government, to keep out the objects of this wall are as follows: thought for the proper answer. On the

angerous to life or property.

Fort Crockett and the Federal reserve other in the regular channel. adjoining the city on the west. The On arriving at either terminus the

which is designed to prevent any unper cross-bar having a stationary rods which extend upward, and around

of the construction. Extending gulfward from the foundation is an apron riprap of granite 27 feet wide and three feet in depth.

"Upon the completed foundation the being keyed and cast into solid conrods are placed in such a way as spec-

broad construction at the base. which work is now being so successful- drawn off into the lower as the vessel thoughts at all. If a railway train is the top of the sa-wall, and along the new level is reached the other gates are meditate—there is only a mad strugon the Gulf side by a railing extending crowded to the water's edge with the We were trying to throw it from the along the edge of the sea-wall. Next, wild tangle of a tropical jungle or the there will be a wide boulevard drive- long-leafed banana trees set out in regwalk, driveway, and park will present and the vessel disappears at sea. an unobstructed view of the ocean from which comes the balmy healthgiving salt-water air. Residences will be erected along the boulevard high above the beautiful sea, thus present-

ing a charming view for miles." three and a half miles of sea-wall con-

foot is 40,000 pounds. Peat as Locomotive Fuel.

Peat is abundantly stored in the Maine bogs. Androscoggin County has enough peat to supply all Maine with fuel for a generation. A number of experiments have recently been made by the Boston & Maine Railroad in the use of peat fuel. So far the tests have given entire satisfaction, and now the company is preparing to give the new locomotive fuel a more extended trial than any heretofore undertaken. The treatment consists in cutting out

jecting these to heavy pressure, which pocket. lowed in its upper end to receive the exudes all the moisture and makes lower ends of said posts, a cap fitting the mass as compact as anthracite. In him red-handed. A crowd collected. A over the upper ends and bolts extending the pressing the cakes take on an man said: between said posts in both directions, elliptical shape, with an inch hole with heads on them to bind the posts running through them, which admits of free burning. In reporting on the first experiments the officials of the road say that they found that this fuel made an gan business in a small way myself." exceptionally hot fire, was free from Bloedel, Buffalo, N. Y., have patented smoke, and that it could be purchased a combination of a sweep-brace, a for less than coal. From an economistandpoint, however, the coal showed to better advantage, owing to slower consumption, but the two advantages named for the peat fully offset that in favor of coal.

Ropes in the British Navy. Every rope used in the British naval board or in dockyard, has woven into one of its strands, for purposes of identification, a red thread. The presumption is that any rope with the red thread found outside of such uses is in the first of the first outside of such uses is in the first outside outside of such uses in the first outside outside of such uses in the first outside outside outside of such uses in the first outside outside outside of such uses in the first outside ou thread found outside of such uses is in trouble. improper hands: This custom in the British navy has prevailed since the days of Nelsoni Some large concerns, but the heart, and the liver, and the stomach. For above where I was lying, and almost Co., 3685 AO Laclede Ave, St. Louis, Mo such as railways, sometimes use an simplicity's sake Dr. Shoop has called this great nerve over my head, a Confederate battery interwoven colored thread.

An Elephant Story.

but began to roll Wolently. The Captain to please them littimensely. So the great also lasting. heads and bodies rolled and swung in it you would like to read an interesting book on back, shooting down stray soldiers and unison, until the steamer, which had no inside nerve disease, write Dr. Shoop. With the book prodding the dead with their bayonets other cargo, and rode light, was in im- he will also send the "Health Token"-an intended minent danger of rolling clean over. passport to good health. Both the book and the The attendants were hurried down into "Health Token" are free. the hold, and, after a great deal of For the free book and Book 1 on Dyspepsia the hold, and, after a great deal of shouting and thumping, managed to stop their dangerous amusement. Jules Verne tells as a fiction of the sinking Box 2531, Racine, Wis. Book 3 on the Kidneys Box 2531, Racine, Wis. Book 5 for Men of a ship in that way, and the question State which book you Book 5 for Men Has some one in Japan been reading Verne, or was the novelist's fancy justified by a real experience?

Reversing Things in Chicago. (Chicago News.) They had just finished breakfast, and he woman of the future was about to start downtown, when her husband

arose from the table, placed his arms about her neck and kissed her. "Dearest," he murmured softly, morbid processes as do not take place ish a strong fastening upon the garwithin the skin itself.

"If a uviol lamp be allowed to act engaging the two members."

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PAVIGATING THE CANAL. A Trip Through the Proposed Waterway

(November Century.)

To make it possible to pass a ship eight years, and by one at sea level 10 the waves. Asistated by the projectors, the better is a question requiring great "To protect the city from the force of one hand, there are required a greatly the waves and currents in the severest increased investment of capital and storms known to occur in the Gulf: to some delay in time, although the latter protect the city entirely from the water in the life of such an enterprise is prob-of the bay and Gulf in all such storms ably of small amount. The deciding in three divisions; my own, under John E. Smith, being in the center. My regas occurred during 50 years preceding factor will probably be the practical inent suffered little. Half the time the enemy could not see us for the mist. rms, such as the one of 1900, No matter what the design, the canal That day, too, in the fog. Hooker, at ever reaching a depth in the city cannot be navigated its entire length by large steamers with the freedom tha. While providing for the above, to they pass up and down a broad river. arrange a filling so as to secure suffi-cient elevation for drainage and sew-erage."

It is contemplated that the width of the canal at the bottom shall be about 150 feet, giving a width on the surface The part of the wall constructed by of from 200 to 350 feet, according to piece of woods. I had to tramp about the municipality was begun Oct. 27, the flatness of the side slopes, dependent 190°, and completed July 29, 1904, on the varying local character of the line the same cold words away the enemy's pickets in the same cold words. three months earlier than the contract rock or earth through which the canal in the same cold woods were doing the time. An extension of one mile has will be dug. As large modern steamers same thing. All night we could see the been constructed by the United States have a beam of 75 feet, it is obvious rockets of the enemy on one side of Government along the beach in front of that two such vessels cannot pass each

base, curving to five feet at the top, sailing vessel, for a tug to take her designs and 144 trade marks went to nail shank. The bottom of the channel It is 17 feet above the mean low tide through. After an inspection, the takseven districts in the United States, designs and 144 trade marks went to nail shank. The bottom of the channel It is 17 feet above the mean low tide through. After an inspection, the takwas to be a day for American history, stand it no longer, ordered Thomand one foot higher than the highest ing on of coal, supplies and a pilot, and
was to be a day for American history, stand it no longer, ordered Thomand one foot higher than the highest ing on of coal, supplies and a pilot, and water of the 1900 storm. Says the being measured for and paying tell that forenoon, hidden in a little wood.

Wy division and regiment lay quite still as to assault immediately. A comparison of the charges, the vessel will then receive at our immediate left the bettle wood. "The sea-wall rests upon a founda- an order entitling her to proceed. This tion of four parallel rows of round pil- order will be like a train order on a going on fiercely. Before noon Gen. happened that one whole hour afterdriven to a depth of 40 feet through the sand and piercing into the clay beneath. In addition to this piling there is be-tween the first and second rows a cold and percing the other and pass a ship coming from the other end or to draw to one side tween the first and second rows a cold and percing into the clay beneath. ween the first and second rows a solid and permit the other ship to pass, or to continuous sheet piling so formed as to get other orders to proceed further. The make a tight wall 12 inches thick, ex- passing of ships will be arranged by der of cannon opened on us. All the by Thomas. Grant, evidently enraged, tending 24 feet below the surface, constructing "sidings;" that is, widenings of the channel into which a vessel dermining action which might in time can draw and moor to clusters of piles. be subjected to the wall on account of When the passing is made the vessel waves and currents of the ocean. Cast then advances to the next siding where over the tops of these five rows of a vessel is expected, all of which will be piles is a continuous concrete base into controlled by telegraphic orders from which are inserted steel reinforcing a central Dispatcher's office, where there will be a chart showing the exact ongue projecting inwardly from its which the wall is formed. In addition position of any ship at any time, corrected instantly by advices received from the local stations. Along the banks in depth. These key slots run longi- there will be semaphore signals by day tudinally throughout the entire length and lights by night, indicating the position of obstructions or vessels ahead, so as to prevent collisions.

On arriving at a lock, the steamer will find a structure similar in principle to the small canal locks with which sea-wall is cast in solid sections. the reader is familiar, but vastly larger. Molds are placed and the mixture of These locks will have a length of about cement and crushed granite is poured 1,000 feet and a width in the clear of into them, and when the mass has set 100 feet, in order to accommodate not the molds are removed. So the work only the steamers 800 feet long now is carried on, each part of the sea-wall building, but to allow for such increase in size as may be realized. The gates tact with the next, so that the wall, closing the locks at the down-stream foundation and entire construction is end will have a height equal to the made into one coherent mass of rock depth of the canal, the height to lift, formation which hardens with age and, say, 10 feet of surplus, or a total and gradually becomes indestructible. of 75 to perhaps 100 feet, according to Within the walf at two-feet intervals conditions—dimensions far in excess of are steel reinforcing rods one and a those of any other lock gates in the half inches by 10 feet long, having at world. As soon as the lock is entered either end a four-inch washer. These and the ship made fast so that it cannot be moved about by the in or outrushing ially to strengthen the wall by binding water, and yet may rise or fall with the the upper and narrower portion to the change of level, the great gates behind kill were not noticed. I have been her will be closed and water admitted in bad runaways, and my thoughts were mighty Union victory. "In raising the grade of the city, into the lock from the higher level or much the same—that is to say, no is ascending or descending. When the coming straight on to a man, he don't space directly back of the sea-wall will opened, and once more the vessel con- gle of body to get out of the way, or be built a broad walk, to be inclosed tinues her journey between banks way, bordered by a parking of grass ular rows in plantations. On arriving

The Dethroning of Alcohol. (November Century.)

The granite used in the construction scientific research of recent years. In knees close to the flag. I thought to of the wall and of the jetties at the entrance to the harbor is from Granite been carefully studying the effects of hold that flag up under the storm of Mountain, one of the largest solid alcoholic liquors upon the various or- bullets. I never saw that banner again granite masses in the United , States, gans of the body, and, although they until after the war. Shortly the rebels covering about 150 acres. As much as differ in their conclusions upon some Ind., has patented a cement post for covering about 150 acres. As much as differ in their conclusions upon some rocks down. We were so close they wire fences composed of a plurality of 500,000 tons have been taken from this closely followed could do this and not expose themsimilar smaller posts, a base-block hol-quarry in the past 10 years. In the these investigations have almost closely followed selves these investigations have, almost or enstructed by the city, there have been tirely, abjured alcoholics as a necessary used 9,900 carloads of piling, 5,200 car- part of their therapeutic outfit. These loads of concrete, 5,000 cars of gran- elaborate studies of alcohol have convinced many that the nourishing and cursed the commanders for sending us in all 20.106 carloads of material. To handle this vast amount of material would require 1.005 trains of 20 cars each or one string of the carloads of the commanders for sending us into such a place without support. I was a church member, myself, but I the imagination, and belong to the errors of the carloads of the colonel, "Why in — are each, or one string of cars 156 miles rors of an age which had no facilities they not fighting at the center! Where long, each car loaded to full capacity. for accurate observation. The food are Grant and Sherman? Are they let-The weight of the sea-wall per lineal qualities of the grains and fruits, it is ting us all be killed for nothing?" now believed by many authorities, are destroyed in the process of making aloholic drinks. Even the stimulating qualities ascribed to alcohol are denied by many, who class it among the narcotics because of its depressant effect.

In the Same Line.

Dr. Washington Gladden was attackmodern finance.

"A modern financier of this type," he said, humorously, "was robbed in Broadway the other day. A little urchin flanked." Sure enough, hundreds of The treatment consists in cutting out in sorry rags slipped up behind him, the enemy were getting behind us at the peat in large cubes and then sub- and snatched his handkerchief from his the right of my regiment. "Some one grabbed the boy-caught

> "'I will run for the police." "But the financier fixed a not unkind-"'Oh, let him alone,' he said. 'I be-

It is of but little use to try to doctor the kidneys ing of geese. Would I pretty soon be Tribune. themselves. Such treatment is wrong. For the kid-killed myself? was all that was in my neys are not usually to blame for their weaknesses or mind, and I went on swearing at the service, from heaving line to hawser, irregularities. They have no power-no self-control. and wherever it may be used, on ship-board or in dockyard, has woven into

This tender nerve is only one of a great system of was dead. nerves. This system not only controls the kidneys, system the "Inside Nerves." They are not the nerves was pouring into our lines a terrific of feeling not the nerves that enable you to walk, to fire. It was so close I could hear the talk, to act, to think. They are the master nerves, men cheering and swearing as they A queer elephant yarn is told in the and every vital organ is their slave. The common Japan Chronicle by the Captain of a trading steames. On one occasion he had on board a cargo of 40 elephants. In could my self see the terrific effects of their shots of the cause each set is in such close sympathy with the others, that weekness anywhere usually results in came up. leading a regiment with him. weakness everywhere.

The one remedy which aims to treat not the Kidneys investigated, and learned that the elephants had in some way found that the serves which are to blame, is head strike him. His horse phants had in some way found that he eleknown by physicians and druggists everywhere as Dr. and fell. Both were dead. phants had in some way found that by Shoop's Restorative, (Tablets or Liquid.) This remedy swaying to and fro. all together, a rocking motion was produced that seemed while it usually brings speedy relief, its effects are

at forty thousand drug stores. Mild cases are often reached by a single Package,

WAR'S MIGHTY COST.

On the evening of the 23d Bragg from his perch on Mission Ridge had looked down to the river and seen nothing but a handful of pickets in brown over the low island on which the city of Galveston. Tex., stands, overwhelming its buildings and drowning men, level design, will require from six to ets, but an army in blue. A bridge was wall of concrete and granite has been eight years, and by one at sea level 10 soon down, and all Sherman's forces built, partly by the city and partly by the two types, all things considered, is over; indeed, I never saw them again.

Fighting for the Foothills. Most of that foggy, nasty day Sherman's Division fought for the foothills in front of Mission Ridge. We advanced in three divisions; my own, under John Grant's far-off right, fought his battle above the clouds and took Lookout Mountain.

When the night came again a part friends on Mission Ridge. Far to our right on the side of Lookout shone a total length is thus about four and a ship will report to the Harbor Master thousand campfires. It was a great vance on Rossville at the Confederate half miles. The wall is 16 feet wide at for a permit to pass, and, if she be a sight. What was to happen in the left flank. Burned bridges delayed

morning? Hooker four hours. Then Grant The 25th dawned in splendor. It seeing that Sherman's lines could these same cannon on the Ridge in himself ordered Thomas's Generals to front. With our own eyes we had seen advance. The historic charge followed column after column of infantry rushing to that part of the Ridge. They capture the first breastworks only; but, were looking for this assault.

field and moved on without firing. Soon we were going for the Ridge on the run. It was half a mile to its foot, and that the top of the Ridge, where I was for half mile was like an entrance into hell. a few minutes close to a Mississippi reg-The roar of the hundred cannon in iment in a rifle pit. They were still front of us became awful. Behind us pouring a fearful fire of rifle and canour own 69 cannon at the river were non at my comrades below them. thundering over our heads.

The officers all yelled to their utmost, striving to keep the men steady and from firing. No cyclone could have been sweeping across there with more awful portent to the rebels. And yet only our rapid change of place by advancing saved us all from being plowed down by the tornado of shells that met us; that and the fact that they were firing too high.

Officers and all were in the ranks in that charge. Swords dangled at our sides useless, but every officer had his robbed me of whatever I had in my revolver in his hand. hand-to-hand struggle the moment we with him to Libby Prison. The words would reach the Ridge.

As to any individual thinking or feeling or fearing there was nothing of it; divisions at the center were storming nothing beyond a mad desire to get up the mountain, and the army of across the open. Wounds that didn't Bragg was already starting in horri-

When we got across that burning open field and came under the with flowers, palms, and trees. The at the far terminus the pilot is dropped terrific fire of the enemy's rifles we stopped stockstill. We could think a little now. We could see the enemy, and were firing ourselves. We all knelt down, for the storm of bullets from behind trees and logs and rifle pits Another potent factor in the dethron-ing of alcohol has been the spirit of scientific research of recent was sweeping everything. The Colonel and myself happened to be on our

We made no advance now: we simply knelt there and fired. The strain was awful. Few spoke, and those who did "God only knows," said the Colonel. "They're not firing a shot anywheres

to help us." We tried to hear cannon at the right

us be destroyed. "Damn such generalship," from more than one powder-begrimed ing certain unfortunate tendencies of and blood-streaked soldier. It looked as if there could not a man of us escape. When all seemed at the worst, one cried: "We are being

but in three minutes that part of my know which four they were. I served regiment was gone. In its place were in Co. H, 23d Mo., from Aug. 25, 1861, suing my comrades into the open below was with Gen. Prentiss in the Hornet's ly look upon the trembling little culprit. me. Lieut. Miller, of my regiment, lay Nest, and was among the prisoners capon the gress, shot through the hips. tured at Shiloh .- C. H. Brown, Co. H. Mathies, my brigade commander, cov- 23d Mo., Melbourne, Mo. ered with blood and apparently dying, sat against a tree. I lay down by Mil- Regiments are the 11th Mo., which lost ler's side, hoping the enemy might be 104 killed or mortally wounded; the lriven back and I be overlooked as one 12th Mo., which lost 112 killed or morof the dead or wounded. The spot was tally wounded; the 15th Mo., which lost covered with wounded and dying—men 115 killed or mortally wounded; and groaning, crying. That part of it had the 26th Mo., which lost 118 killed or no more effect upon me than the quack- mortally wounded .- Editor National

> Generals. and his moans stopped only when he

would load to fire again. I could mycame up, leading a regiment with him. saw a shell from this battery over my head strike him. His horse reared up

The Surrender. Soon the rebel line that had pursued

my comrades down the slope came back, shooting down stray soldiers and to make sure they were out of the way. had a vision of Libby Prison. Yet there was nothing for me to do but surrender. A piece of a newspaper happened to lie there on the grass. It was my flag of truce. I waved it and a couple of Georgians fought over my couple of Georgians fought over my sword and pistols. Each claimed to have captured me. Then I was started up the Ridge and under a terrific artillery fire from Grant's cannon back at the Dr. Shoop's river. Just then over at Grant's center the divisions of Woods and Sheridan were making that historic charge in front of Orchard Knob. river. Just then over at Grant's center were making that historic charge in front of Orchard Knob; that charge that was to break the center of Bragg's army. It also was to break the backbone of the Southern rebellion. Had that assault by Grant's center been made at the time he ordered it made hundreds of the men sacrificed in front of Sherman would have been saved.

It was to have followed the moment that Hooker, on the right, should ad-Prepared in both Liquid and Tablet form. For sale of Sherman would have been saved.

CONSUMPTION CATARRH CURED—FREE

Conder Cure Co., 2310 Junior Bidg., Los Ange.

The order, then, had not been given with a rush. The regiments were to without a leader, and without instructions, they stormed on and on clear up In one long, blue line we entered the planted their 60 flags on top of Mis-

sionary Ridge. To return to myself. I was taken to

"What's your regiment?" cried handsome young rebel officer to me. "The 5th Iowa," I answered. "Got you this time," he answered

ardonically. "And your regiment," I asked. "Ninth Miss.

I thought of Iuka. "How about Iuka," called out with a grin. "Well, I guess you got us there," said he Captain.

The courtesies of the occasion were over. Another officer came up to me, We expected a pockets, and invited me to go on a trip were hardly out of his mouth when I glanced behind and to my left. Grant's up the mountain, and the army of ble and disgraceful flight. It was a

The Big Price of War.

That night 12,000 of Grant's and in the woods about Missionary Ridge else throw the train from the track. The 30,000 other dead and wounded at Chickamauga must be added to the fearful cost of taking Chattanooga. It was a big price, but we were accustomed to big prices in the civil war. It would be out of place here to tell what happened next—the awful story of my 15 months' experiences in Southern prisons. Nearly all who were tak-

en with me that day never saw their homes again. Years after that battle I went to a Reunion of the Blue and the Gray at Chattanooga. The two Georgians who had captured me lived near there, and we and our wives picnicked together on the grass of the old battlefield. Time

brings odd things to pass, don't it? IS YOUR HEART WEAK?

nformation that resulted in the complete cure of Alice A. Wetmore, from Chronic Heart Disease, sent you by

mail absolutely FREE. Alice A. Wetmore, Box A 67, Norwich. Conn., wishes to tell every reader of The National Tribune that if they - are suffer from Heart Disease of any form, she will, on receipt of their address, without any charge whatever, direct hem to the perfect Home Cure she so successfully used.

Coming as it does in the face of quackery and deceit the information, so freely given, must be gladly welor center. Not a shot was being fired. comed by those who wish a simple, in-Our Generals were simply standing up expensive and withal a genuine cure. on top of Orchard Knob and watching To escape this most terrible of all diseases should be the object of every sufferer, for to delay or take dangenous nostrums may, at any time, mean a fatal result. Our advice is to get this life-saving information at once and while it may be had without cost.

Missouri's Fighting Regiments.

Editor National Tribune: I see in our list of Fighting Regiments that I was told to run over there. I did, Missouri has four, and I am anxious to wounded men and dead lying on the to Sept. 22, 1864. I first smelled rebel grass. A line of graycoats was pur- powder at Shiloh, April 6. In 1862 I

Missouri's quota of the 300 Fighting

was dead.
On a little spur of the hill not 50 feet

sees it wants one. I will devote all my future time to the business, and expect to clear \$4,000.00 this year.
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